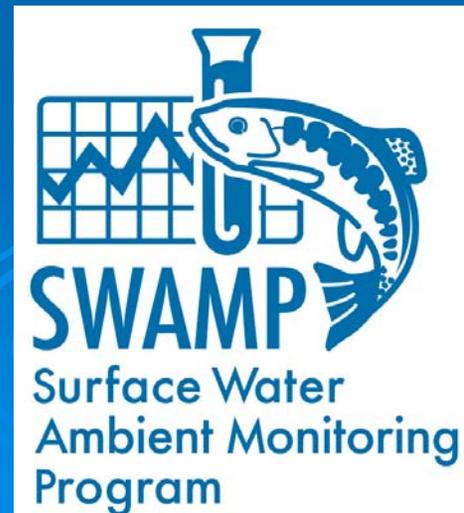


California's Surface Water Ambient Monitoring Program

“SWAMP”

September 22, 2005



SWAMP: Required by AB 982

- Comprehensive state program (surface water)
- Coordinate all Board ambient water quality monitoring Programs/projects
- High Quality Data (Quality Assurance)
- Comparable data
- Accessible

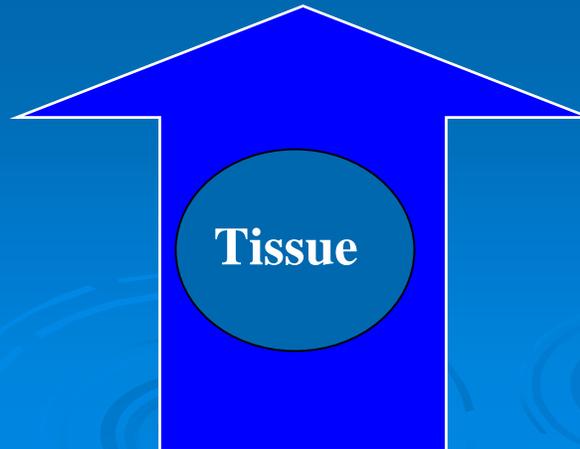
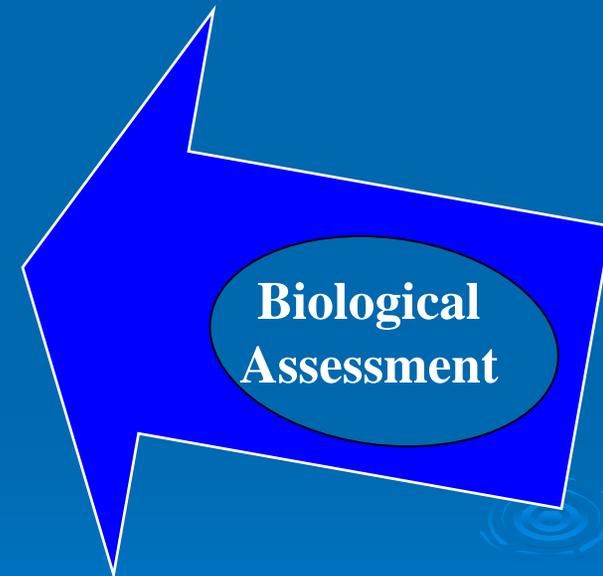
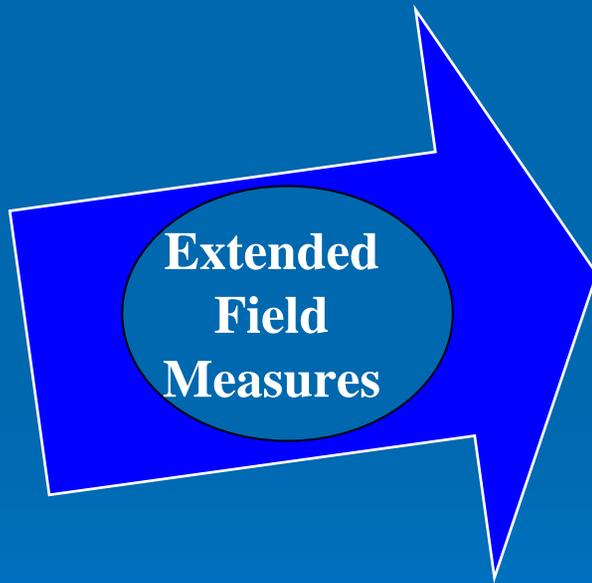
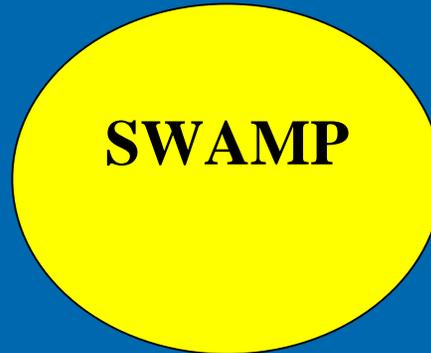
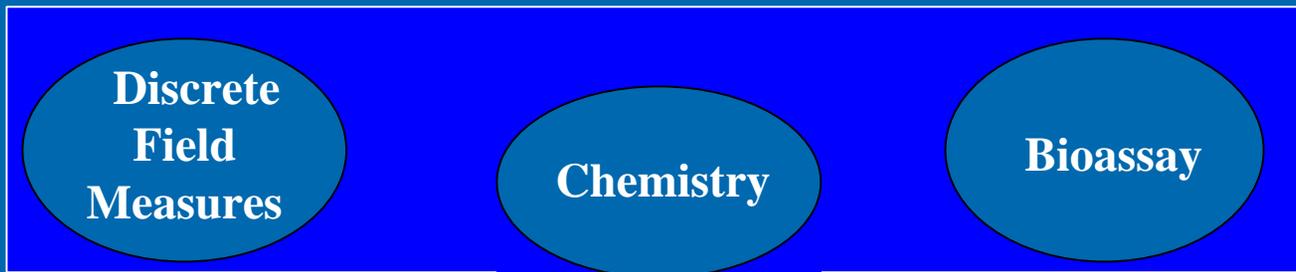
Why Monitor?

- Status
- Trends
- ID specific water quality problems
- Gather information to design pollution prevention or remediation programs
- Determine whether program goals are being met
 - **Compliance with regulations**
 - **Implementation of control actions**

The Challenge: CA

- 211,000+ miles rivers and streams
 - Over 10,000 lakes (1.6+ million acres)
 - Over 1,300,000+ acres of bays and estuaries
 - 1,609 miles of coastline
- 

Water Quality Data



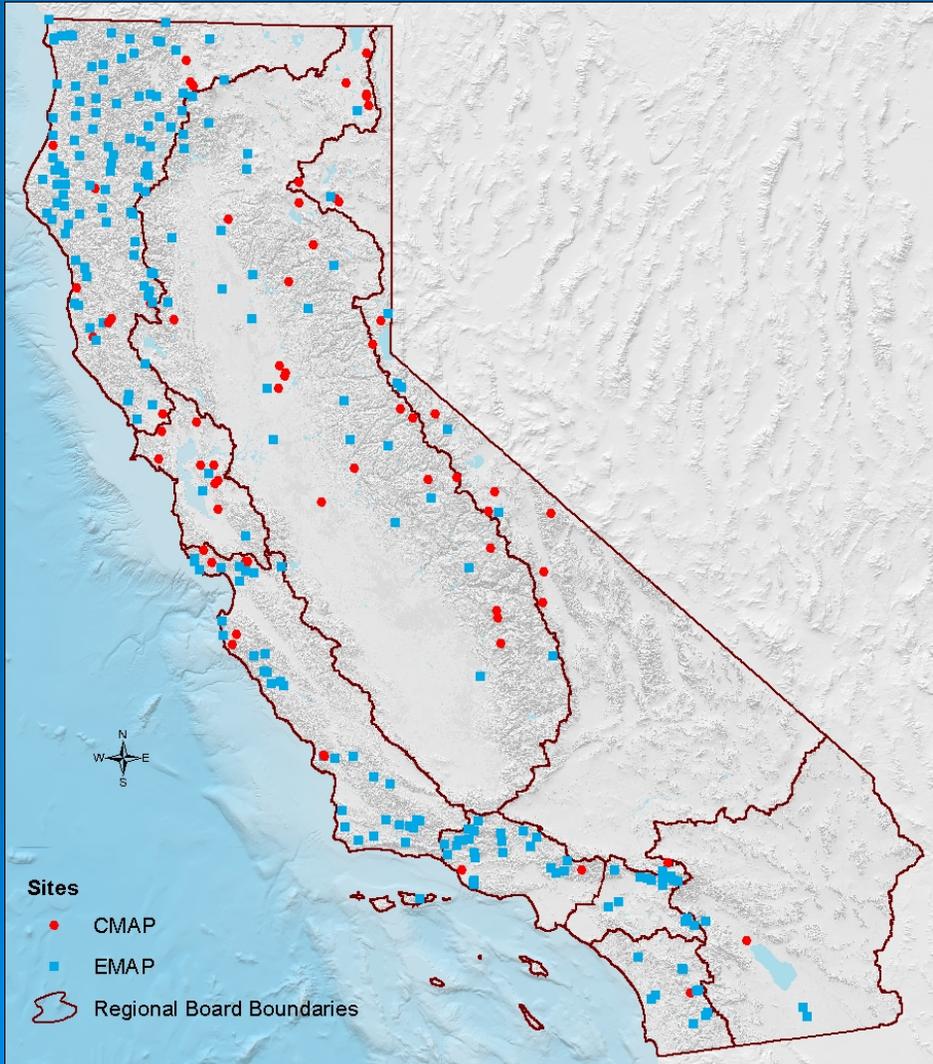
Implementation Strategy

- Monitoring Program Strategy
- Monitoring Objectives
- Monitoring Design
- Core Indicators of Water Quality
- Quality Assurance
- Data Management
- Data Analysis/Assessment (CALM)
- Reporting
- Programmatic Evaluation
- General Support and Infrastructure

State & Regional Monitoring Components

- Vary in scale of questions, objectives and design
- State program:
 - Asks broad questions:
 - What % of state's waterbodies are healthy ?
 - Uses of program
 - EPIC
 - 305b report
 - Legislative reports
- Regional program's objectives and design are more specific
 - Are specific waterbodies meeting WQ standards?
 - 303d list
 - Are specific management/restoration efforts successful ?

W-EMAP and CMAP Sites Sampled



Inland surface waters
Probability-based
sampling

W-EMAP

2000-2003

Base statewide study
50 sites/year

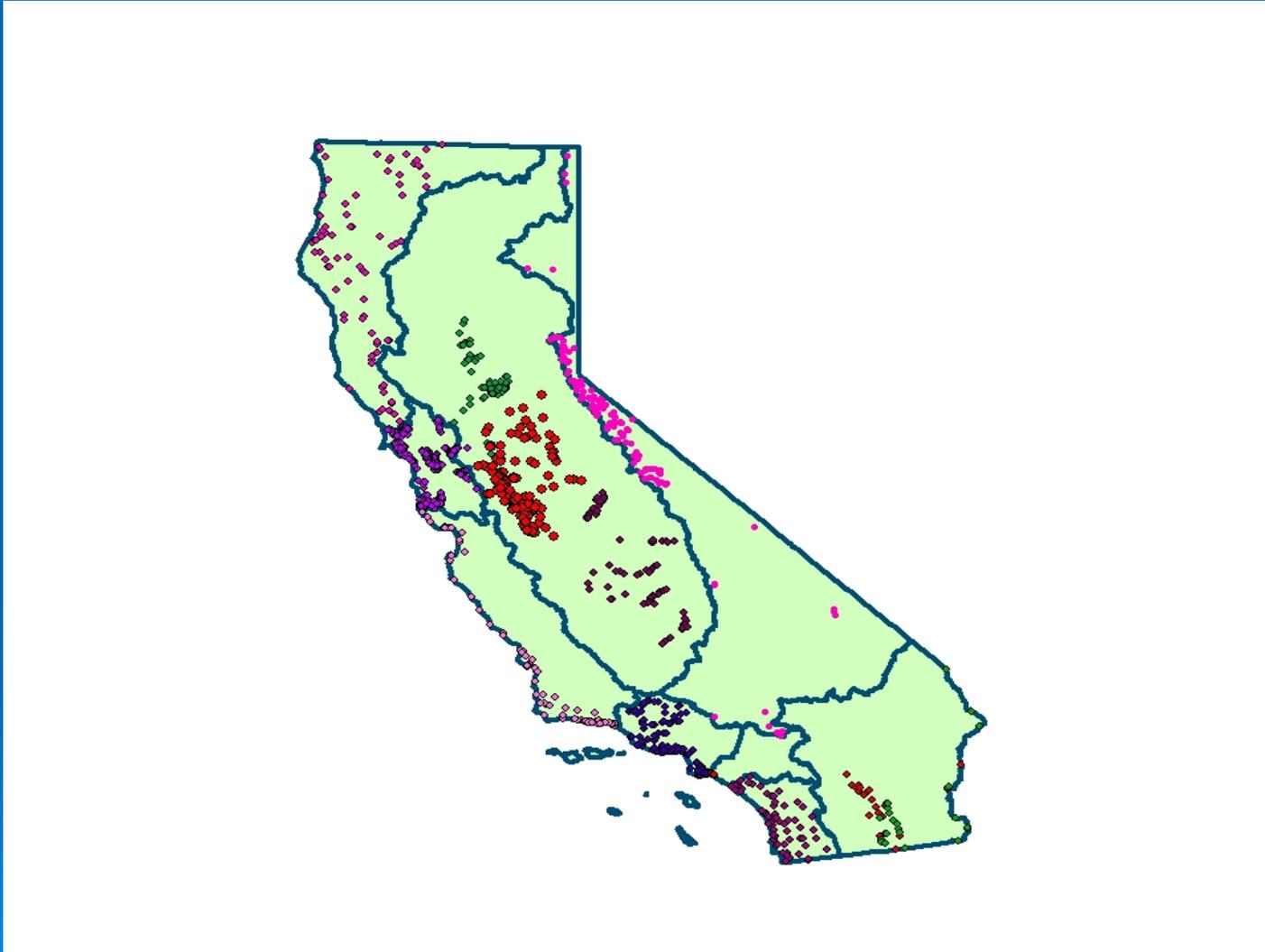
3 special study areas
CA

CMAP

Sampling initiated
2004

50 sites/year statewide

Regional Monitoring 2001-04



Building “Comparability”

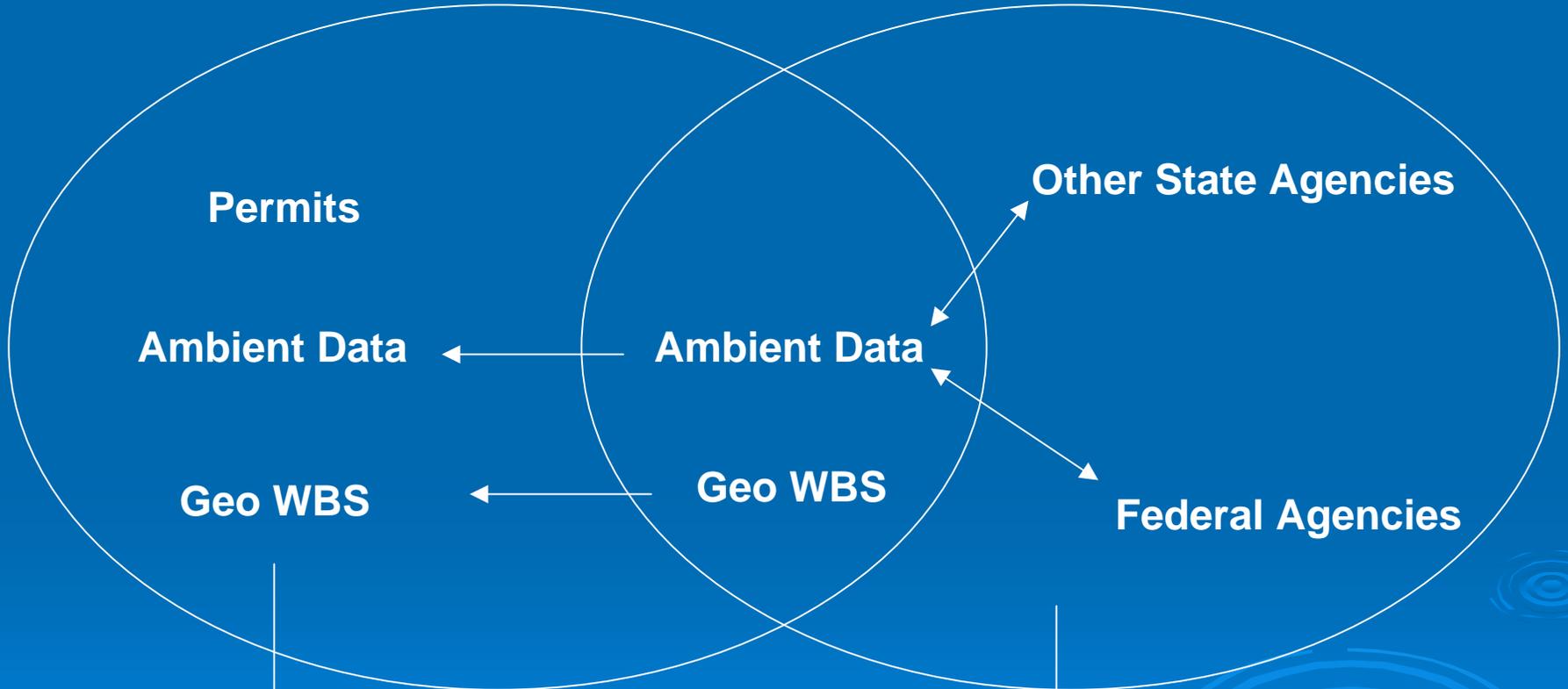
- SWAMP is a state framework to coordinate consistent and scientifically defensible methods and strategies for improving water quality monitoring, assessment, and reporting.
- Common Indicators
- Comparable Methods
- Quality Assurance Program
- Database w/ metadata
- Information Exchange Network
- Tool Box and Training

Data Integration and Accessibility

CIWQS

SWAMP

**CA Environmental
Data Exchange
Network**



EPA's Assessment Database

EPA's STORET database

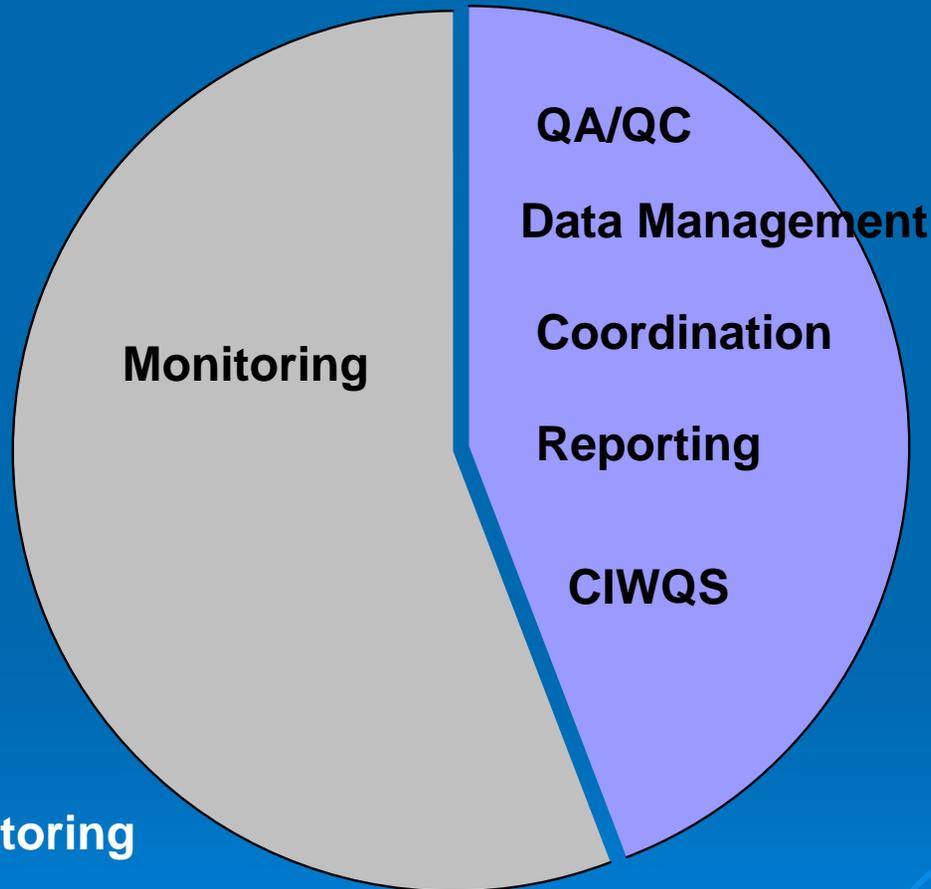
External Scientific Review

- Scientific Planning and Design Committee (SPARC)
- Triennial review of entire program
- Fall 2005 review

SWAMP November 2000

- Proposed a cost efficient monitoring program to meet all CWA needs for all water types and pollutant sources
- Requested
 - \$59 to \$115 million (\$3,400,000)
 - 87 to 132 PYs (17 PYs)
 - WDPF surcharge

Annual SWAMP Expenditures



17 PYs

\$1.9 million--Monitoring

**\$1.5 million—Infrastructure and
Coordination**

Outstanding Issues - Insufficient Resources

- Comprehensive monitoring not occurring
- Increase in SWAMP “partners”
- Consistency/Comparability = Training
- QA Coordination
- Requesting/receiving/managing data

Current 106 Budget

➤ NPDES Wastewater (Staff)	-	\$3.9 million
➤ NPDES Stormwater (Staff)	-	0.58
➤ TMDL (Staff)	-	<u>0.93</u>
Subtotal		\$5.4 million
USEPA Contract Services	-	<u>\$4.7 million</u>
Total		\$10.1 million

Next 12 Months

- **Continue regional assessments**
- **Continue statewide assessment**
- **Intra- & Inter-agency Outreach/Education**
- **Continue Training**
- **Reporting (305b, RB assessments)**
- **Public fact sheets**
- **National Water Quality Monitoring Council**
- **Continue database development**
- **2nd. Edition Quality Management Plan**
- **2nd SPARC (external peer review)**

SWAMP FUNDING SUMMARY

Fiscal Year	Monitoring Dollars	% of 00-01 Budget
00-01	\$4,834,000	NA
01-02	\$4,440,000	-8%
02-03	\$4,190,000	-13%
03-04	\$4,900,000	<1%
04-05	\$3,472,000	-28%
05-06	\$3,646,000	-25%

SWAMP PROGRAM FUNDING FY 04/05

	STAFF	MONITORING DOLLARS	TOTAL ALLOCATION
Region 1	1.2	\$ 276,888	\$ 413,937
Region 2	1.1	\$ 207,666	\$ 328,732
Region 3	0.9	\$ 207,666	\$ 303,843
Region 4	1.1	\$ 253,814	\$ 380,429
Region 5	2.0	\$ 530,702	\$ 773,829
Region 6	1.1	\$ 253,814	\$ 378,678
Region 7	0.9	\$ 207,666	\$ 302,007
Region 8	0.7	\$ 184,592	\$ 269,304
Region 9	0.8	\$ 184,592	\$ 273,016
SWRCB	7.7	\$ 1,164,600	\$ 2,105,209
TOTAL	17.5	\$ 3,472,000	\$ 5,528,984
	(\$2,056,984)		